

2008 Defense Modeling & Simulation Conference (DMSC)

OneSAF Tutorial

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Report Documentation Page				Form Approved OMB No. 0704-0188	
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1. REPORT DATE 10 MAR 2008		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE OneSAF Tutorial				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) DPM OneSAF; SAIC				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES 2008 DoD M&S (Modeling and Simulation) Conference Presentations held in Orlando, Florida on March 10 - 14, 2008, The original document contains color images.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 13	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Agenda

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- **Program Overview** 10:30 – 11:00
 - **Simulation Overview** 11:00 – 12:00
 - **Small Urban Operations Demonstration** 12:00 – 12:30
 - **Lunch**
 - **JME Terrain Visualization Demo** 13:00 – 13:15
 - **OneSAF Architecture Overview** 13:15 – 13:45
 - **HUMINT Demo** 13:45 – 14:00
 - **OneSAF Development Process** 14:00 – 14:30
 - **ACRT Demo** 14:30 – 14:45
 - **Handover process / summary / Q&A** 14:45 – 15:00

One Semi-Automated Forces (OneSAF)

- A composable, next generation simulation architecture supporting both Computer Generated Forces (CGF) and SAF operations
- Provides a full range of operations, systems, and control processes (TTP)
- Supports modeling from entity up to brigade level
- Supports DIS, HLA, MSDL, JC3IEDM and USA ABCS interoperability
- Provides variable levels of composability, fidelity and representation
- Supports multiple Army M&S domain (ACR, RDA, TEMO) applications.

• Urban Operations with Contemporary Operating Environment (COE) Focus

Software only

Platform Independent
(Linux / Windows)

• V2.0 Released Feb 2008

Capable of replacing US Army legacy entity-based simulations: BBS, OTB / ModSAF, CCTT / AVCATT SAF, Janus (A&T), JCATS MOUT

Software Distribution to:

- RDECs / Battle Labs / Active Duty Brigades & Battalions
- Service / Joint Organizations
- International Partners
- USG / Academia

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V2.0 Capabilities

Released 29 Feb 08

- **Scale up to 30k entities (4x improvement over v1.0)**
- **Improved data collection tool for experimental/analytical use case**
- **Improved parametric data loading (loading classified data direct from AMSAA)**
- **Improved terrain representations (SWA terrain with over 30k buildings, 300x300km, 250 Ultra-High Resolution Bldgs)**
- **Additional/improved COE behaviors (Hijack, sniper, IED emplacement, Unconventional infiltration, etc.)**
- **C2 stimulation (ABCS) by all entity fidelity types (v1.0 only allowed higher fidelity entities to stimulate C2 systems)**
- **SMDC (co-developer) additional satellite models integrated**

Scalability

V1.0 vs. V2.0 GAT Data Comparison

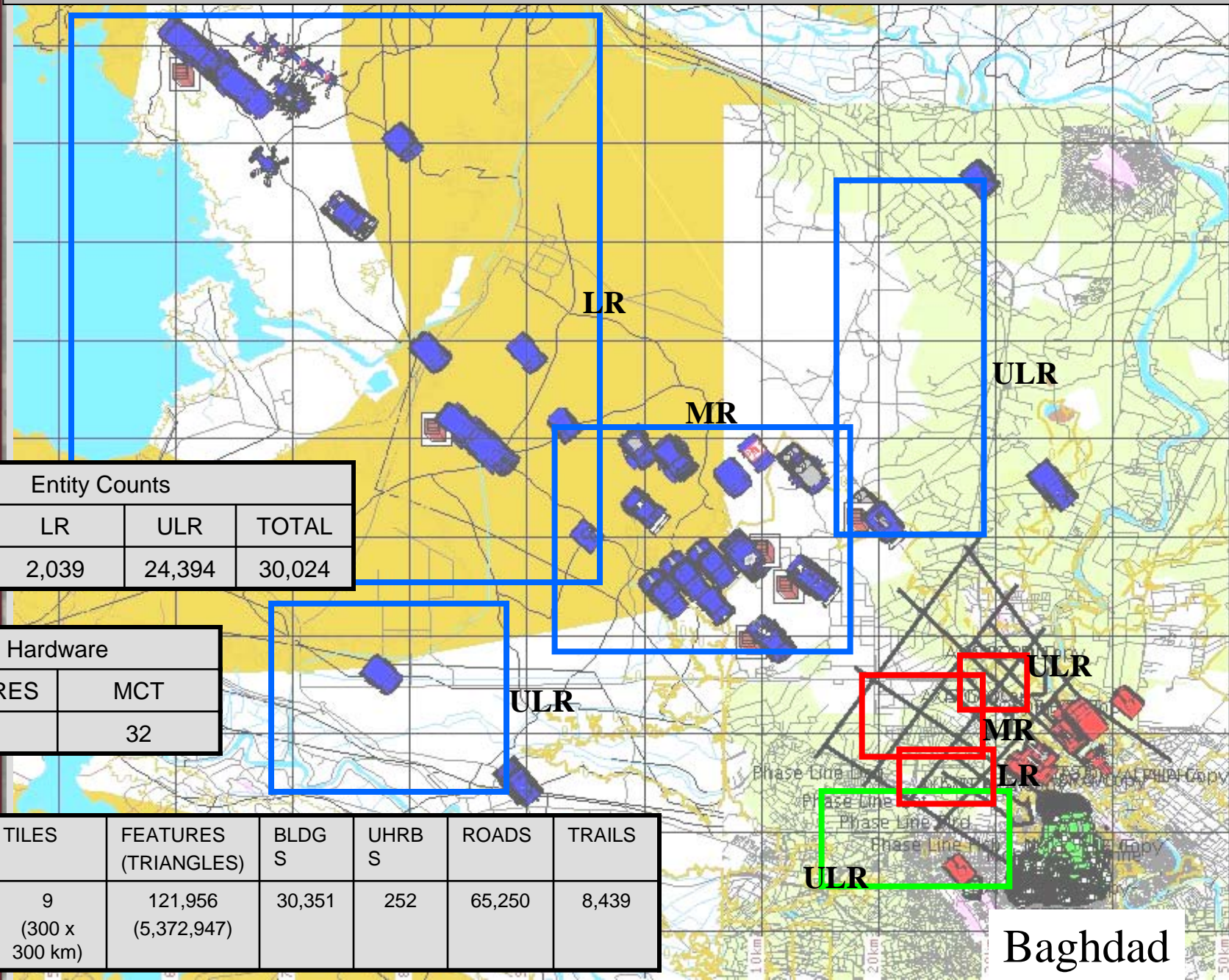
VERSION	TERRAIN	TILES	FEATURES (TRIANGLES)	BUILDINGS	UHRBS	ROADS	TRAILS
V1.0	NTC	4	12,993 (1,310,048)	136	9	8,834	732
	JRTC	4	11,969 (1,256,147)	444	21	3,017	0
V2.0	SWA	9	121,956 (5,372,947)	30,351	252	65,250	8,439

TERRAIN

VERSION	Large Scale Exercise Entities						HARDWARE	
	H R	MR	LR	ULR	TOTAL		SIMCORES	MCT (Workstations)
V1.0		2,332	4,453		6,785		19	50
V2.0		3,591	2,039	24,394	30,024		21	32

RESOURCES

STARTEX Snapshot of V2.0 GAT Large Bde Exercise



Entity Counts

MR	LR	ULR	TOTAL
3,591	2,039	24,394	30,024

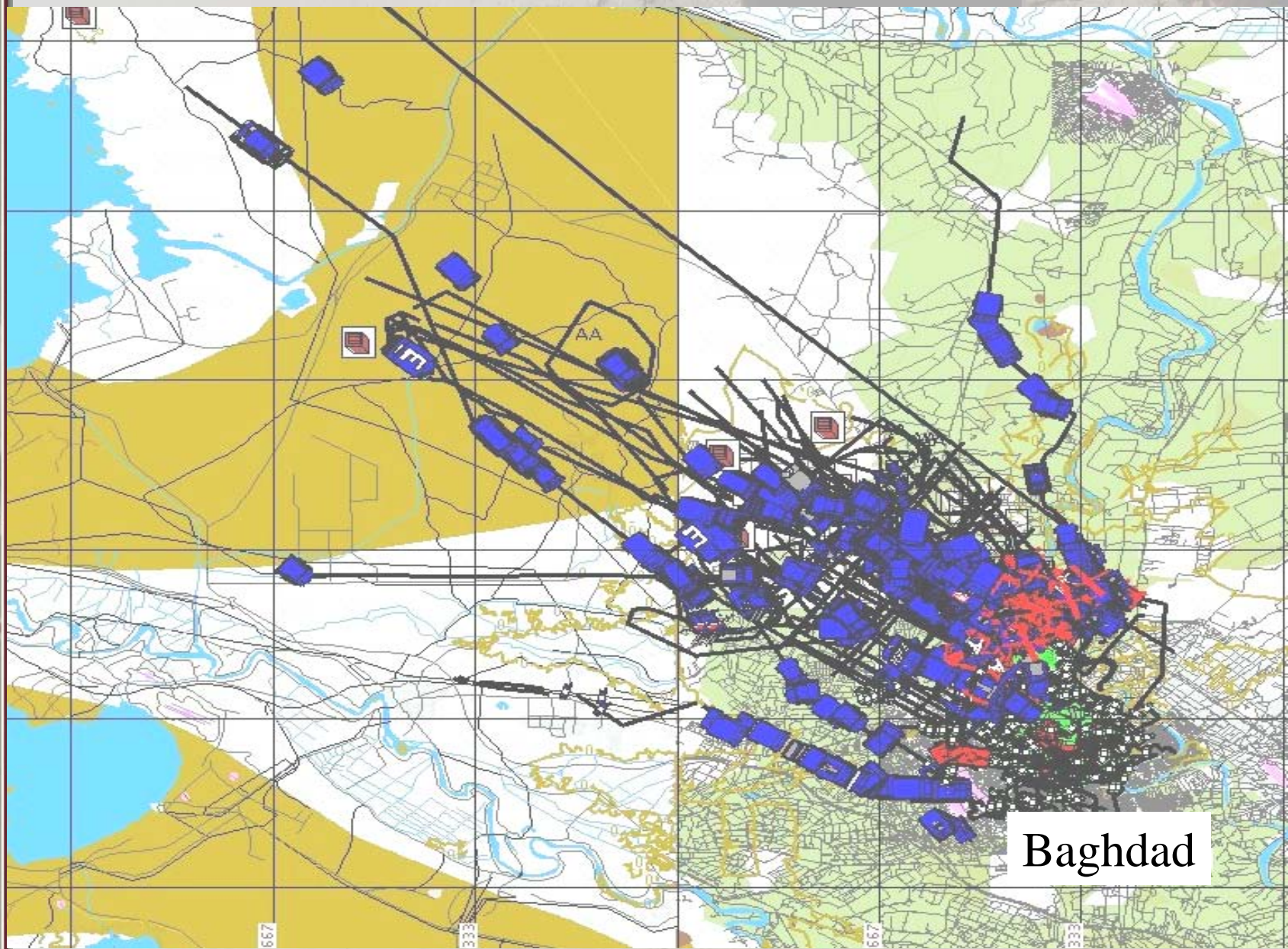
Hardware

SIMCORES	MCT
21	32

TERRAIN	TILES	FEATURES (TRIANGLES)	BLDG S	UHRB S	ROADS	TRAILS
SWA	9 (300 x 300 km)	121,956 (5,372,947)	30,351	252	65,250	8,439

Baghdad

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Recent Accomplishments

- **FY07 SE Core successful handover/integration of first year required capabilities for AVCATT/CCTT (terrain, environment, COE)**
- **FCS utilization of OneSAF for Tactical Leaders Course training AETF Leaders on SO1 systems employment**
- **Air Assault Expeditionary Force (AAEF) utilization of OneSAF as ground combat model for Spiral D**
- **OneSAF International v1.0 fielded**
 - **ITSEC Partnership for Peace (PfP) Federation Demo**
- **C4ISR-On the MoveTestbed (Ft. Dix – CERDEC) utilization of OneSAF as ground combat model for FY07 experimentation**
- **OneSAF fielded as ground model for USMC Combined Arms C2 Training Upgrade System (CACCTUS) – Used now for training at 29 Palms**

The background of the slide is a faded, grayscale photograph of several soldiers in tactical gear. They are positioned around a dark doorway in a stone wall. One soldier is in the foreground on the left, another is entering the doorway, and a third is on the right holding a rifle. The overall tone is serious and military.

V3.0

(Highlights of Coming Attractions)

FY08 Efforts

A Sample

- **Developmental:**

- BCS3 Stimulation (logistics C2)
- Counter IED Models
- Improved RWA/FWA Mobility models (supports SE Core/AVCATT work)
- Computer Network Attack Model (THREATS Requirement)
- Refined FCS system models (authoritative representations)
- Usability (new GUI for TEMO Use Cases)
- Robotics Models (RSJPO funded) for collective training
- Continued performance enhancements in urban environments

- **Events:**

- TRADOC Complex Web Defense (CWD) Experiment
- FCS Spinout One
- SE Core Integration for FY08 AVCATT/CCTT
- AAEF Spiral E

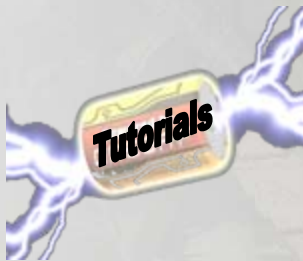


Questions

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One Semi-Automated Forces Spring 08 Users Conference April 7 - 11

Agenda Highlights



**V2.0 Capabilities
Virtual Devices
Gaming Interfaces
Co Developer Briefings
New Release Information
Developer Q&A Sessions
Guest Speakers**



Location: Holiday Inn Select UCF, Orlando

Registration: <http://www.onesaf.net/conference.php>

Additional Details: <http://www.onesaf.net/>